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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,265	03/26/2004	Keiji Hirao	NANP118US	1621
23623 7590 04/27/2007 AMIN, TUROCY & CALVIN, LLP 1900 EAST 9TH STREET, NATIONAL CITY CENTER 24TH FLOOR, CLEVELAND, OH 44114			EXAMINER LANG, AMY T	
			ART UNIT 3731	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			04/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary

Application No.

10/811,265

Applicant(s)

HIRAO ET AL.

Examiner

Amy T. Lang

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 1,2,4 and 6-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3,5,9 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

The new grounds of rejection set forth below are necessitated by applicant's amendment filed on 2/15/2007. In particular, claims 3, 9, and 10. This combination of limitations was not present in the original claims. Thus, the following action is properly made final.

All previous rejections not included in this office action have been withdrawn in light of applicant's amendments filed 2/15/2007.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. **Claims 3, 5, 9, and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartley (US 6,054,420) in view of Kimura (JP 07-305079).

With regard to **claims 3 and 9**, Hartley discloses a lubricant composition for a two cycle engine, which encompasses internal combustion engines, comprised of ester base oil and a second ester (column 1, lines 1-45). The ester base oil is obtained from ethylene glycol, an ethylene oxide adduct of a diol having a neopentyl structure, and a monocarboxylic acid comprising 55 mol% of a linear monocarboxylic acid (column 1, line 35 through column 2, line 20). The second ester is obtained from pentaerythritol, a neopentyl polyol alkylene oxide adduct and an aliphatic monocarboxylic acid (column 1, lines 39-45). Therefore, the ester base oil clearly overlaps the instantly claimed ester (A) and the second ester clearly overlaps the instantly claimed ester (B). The ester base oil is present from 45-94 wt% and the second ester from 5-18 wt%, which clearly overlaps the instant claims (column 1, lines 35-45). However, Hartley does not disclose the ratio of ethylene oxide to diol.

Kimura also disclose a lubricating composition for an internal combustion engine comprising an ester obtained by reacting an alkylene oxide, a polyhydric alcohol, and a monocarboxylic acid to produce an ethylene oxide adduct of a diol having a neopentyl structure ([0017], [0018]). The mole ratio of alkylene oxide to alcohol is 1-10 to 3, which clearly overlaps the instant ranges ([0018]). Since Kimura also discloses a composition for an internal combustion with a specific mole ratio and Hartley is silent regarding the mole ratio, it would have been obvious to one of ordinary skill at the time of the

invention for Hartley to use the mole ratio of ethylene oxide to diol as disclosed by Kimura.

Although Hartley does not specifically disclose the dynamic viscosity, viscosity index, and total acid value of the lubricating composition, these properties are intrinsic to the mixture. Since Hartley discloses the same esters as is instantly claimed in the same amounts, the properties of dynamic viscosity, viscosity index, and total acid value would also be the same as instantly claimed.

With regard to **claims 5 and 10**, Hartley further discloses the lubricating composition comprising various additives specifically 5-20 wt% of a detergent/dispersant and 1-5 wt% of an antioxidant (column 2, lines 61-65; column 4, lines 51-53; column 6, lines 51-60). Hartley also discloses a viscosity modifier, which encompasses viscosity index improvers, and the total additive package from 1-35 wt% (column 2, lines 61-67). Therefore, it would have been obvious to one of ordinary skill at the time of the invention for viscosity modifier to be present from 0.01 to 30 wt%.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy Lang whose telephone number is (571) 272-9057. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

4/18/2007

ATL


ANH TUAN T. NGUYEN
SUPERVISORY PATENT EXAMINER
4/23/07